

WHAT IS CLAIMED IS:

1. A communication method of transmitting and receiving command data for controlling a device connected to a communication line by selecting an arbitrary one of a plurality of different communication systems, wherein

at least some of a plurality of command data of each of said different communication systems are used in all of said communication systems.

2. A method according to claim 1, wherein said different communication systems include a communication system based on an IEEE1394 standard.

3. A method according to claim 1, wherein said different communication systems include a communication system based on an RS-232C standard.

4. A method according to claim 1, wherein said different communication systems include a communication system based on an RS-422 standard.

5. A method according to claim 1, wherein said different communication systems include a communication system based on a USB standard.

6. A communication method of transmitting and

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receiving command data for controlling a device
connected to a communication line by selecting an
arbitrary one of a plurality of different communication
systems and, on the basis of the received command data,
5 generating control data for a device connected to said
communication line, wherein

at least some of a plurality of command data
generated by each of said different communication
systems are used in all of said communication systems.

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7. A method according to claim 6, wherein said
different communication systems include a communication
system based on an IEEE1394 standard.

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8. A method according to claim 6, wherein said
different communication systems include a communication
system based on an RS-232C standard.

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9. A method according to claim 6, wherein said
different communication systems include a communication
system based on an RS-422 standard.

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10. A method according to claim 6, wherein said
different communication systems include a communication
system based on a USB standard.

11. A communication apparatus comprising:

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a) a plurality of communicating means provided in a one-to-one correspondence with a plurality of different communication systems to transmit and receive command data for controlling a device connected to a communication line; and

b) decoding means for decoding the command data received by said plurality of communicating means and controlling a device connected to said communication line,

wherein said decoding means generates common control data for command data received by said plurality of communicating means by respective communication systems thereof and having the same function.

12. An apparatus according to claim 11, wherein said decoding means comprises storage means for storing, in advance, the control data for controlling a device connected to said communication line, and address generating means for generating an address in said storage means storing the control data, in accordance with the command data received by said plurality of communicating means, and

said address generating means generates the same address in said storage means for the command data received by said plurality of communicating means by respective communication systems thereof and having the

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~~same function.~~

13. An apparatus according to claim 11, wherein
the command data received by said plurality of
5 communicating means by respective communication systems
thereof and having the same function use the same code
data.

Sub. 13 14. An apparatus according to claim 11, wherein
10 said plurality of communicating means include
communicating means based on an IEEE1394 standard.

15. An apparatus according to claim 14, wherein
said plurality of communicating means include
15 communicating means based on an RS-232C standard.

16. An apparatus according to claim 14, wherein
said plurality of communicating means include
communicating means based on an RS-422 standard.
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17. An apparatus according to claim 14, wherein
said plurality of communicating means include
communicating means based on a USB standard.

25 18. A communication apparatus comprising:
a) a plurality of communicating means provided in
a one-to-one correspondence with a plurality of

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different communication systems to transmit and receive command data for controlling a device connected to a communication line; and

5 b) supply means for supplying the command data to said plurality of communicating means,

wherein at least some of a plurality of command data, supplied by said supply means, of each of said different communication systems are used in all of said communication systems.

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19. An apparatus according to claim 18, wherein said plurality of communicating means include communicating means based on an IEEE1394 standard.

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20. An apparatus according to claim 19, wherein said plurality of communicating means include communicating means based on an RS-232C standard.

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21. An apparatus according to claim 19, wherein said plurality of communicating means include communicating means based on an RS-422 standard.

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22. An apparatus according to claim 19, wherein said plurality of communicating means include communicating means based on a USB standard.

23. A communication apparatus comprising:

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a) a plurality of communicating means provided in a one-to-one correspondence with a plurality of different communication systems to transmit and receive command data for controlling a device connected to a communication line; and

b) decoding means for decoding the command data received by said plurality of communicating means and controlling a device connected to said communication line,

wherein said plurality of communicating means comprise at least first communicating means capable of transmitting and receiving N command data and second communicating means capable of transmitting and receiving M command data, and at least some of the M command data are included in the N command data.

24. An apparatus according to claim 23, wherein said plurality of communicating means include communicating means based on an IEEE1394 standard.

25. An apparatus according to claim 24, wherein said plurality of communicating means include communicating means based on an RS-232C standard.

26. An apparatus according to claim 24, wherein said plurality of communicating means include communicating means based on an RS-422 standard.

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27. An apparatus according to claim 24, wherein said plurality of communicating means include communicating means based on a USB standard.

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28. A communication apparatus comprising:

a) first communicating means for performing data communication in accordance with a first communication system;

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b) second communicating means for performing data communication in accordance with a second communication system different from said first communication system;

c) first detecting means for detecting a connection state of said first communicating means with respect to a communication line; and

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d) control means for controlling switching between said first and second communicating means in accordance with an output from said first detecting means.

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29. An apparatus according to claim 28, wherein said first communicating means comprises power supply means for supplying power.

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30. An apparatus according to claim 29, wherein said first detecting means detects the connection state of said first communicating means by measuring a power supply voltage of said power supply means.

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31. An apparatus according to claim 30, wherein
said first detecting means measures the power supply
voltage of said power supply means at predetermined
time intervals and detects the connection state of said
5 first communicating means in accordance with the
measurement result.

sub. 15 32. An apparatus according to claim 28, wherein
said plurality of communicating means include
10 communicating means based on an IEEE1394 standard.

33. An apparatus according to claim 32, wherein
said plurality of communicating means include
communicating means based on an RS-232C standard.
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34. An apparatus according to claim 32, wherein
said plurality of communicating means include
communicating means based on an RS-422 standard.

20 35. An apparatus according to claim 32, wherein
said plurality of communicating means include
communicating means based on a USB standard.

25 36. An apparatus according to claim 32, wherein
said second communicating means performs a differential
operation.

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37. An apparatus according to claim 28, further comprising:

5 second detecting means for detecting a connection state of said second communicating means with respect to a communication line,

10 wherein said control means controls switching between said first and second communicating means in accordance with an output from said first detecting means or an output from said second detecting means.

38. An apparatus according to claim 37, wherein said second communicating means comprises power supply means for supplying power.

15 39. An apparatus according to claim 38, wherein said second detecting means detects the connection state of said second communicating means by measuring a power supply voltage of said power supply means.

20 40. An apparatus according to claim 39, wherein said second detecting means measures the power supply voltage of said power supply means at predetermined time intervals and detects the connection state of said second communicating means in accordance with the
25 measurement result.

41. An apparatus according to claim 37, wherein

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said second detecting means detects the connection state of said second communicating means in accordance with a voltage level on a signal line of a communication line.

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42. A communication method comprising:

a first communication mode which performs data communication on a first communication line on the basis of a first communication system, and a second
10 mode which performs data communication on a second communication line on the basis of a second communication system different from said first communication system,

wherein said communication modes are switched in
15 accordance with a connection state with respect to said first communication line for said first communication system.

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